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11. The method of claim 10 further comprising:

detecting occurrences of transition signals commanding the dispensing gun to turn ON and OFF;

turning the dispensing gun ON and OFF in response to the transition signals; and

detecting edges of fluid dispensed onto the substrate in response to the dispensing gun being turned ON and OFF.

- 12. The method of claim 10 further comprising providing an output relating to the delays.
- 13. The method of claim 10 further comprising:

 providing a signal representing a presence of the substrate in a proximity of the dispensing gun; and

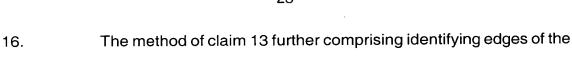
sampling the transition signals and the feedback signals on a periodic basis;

storing sampled transition signals and sampled feedback signals; and

correlating the sampled feedback signals to the sampled transition signals to determine the delays.

- 14. The method of claim 13 further comprising sampling the transition signals and the feedback signals on a periodic basis determined by equal increments of time.
- 15. The method of claim 13 further comprising sampling the transition signals and the feedback signals on a periodic basis determined by equal increments of relative motion between the substrate and the dispensing gun.

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transition signals commanding the dispensing gun to turn ON and OFF.

- 17. The method of claim 16 further comprising identifying leading edges of the transition signals representing commands to turn the dispensing gun ON.
 - 18. The method of claim 16 further comprising identifying trailing edges of the transition signals representing commands to turn the dispensing gun OFF.
 - 19. The method of claim 16 further comprising identifying leading and trailing edges of the transition signals representing commands to turn the dispensing gun respectively ON and OFF.
- 15 20. The method of claim 16 wherein the method further comprises:

 generating first, narrow, fixed-width pulses in response to edges of
 the sampled transition signals; and
 generating second, narrow, fixed-width pulses in response to an
 edge of respective ones of the sampled feedback signals.

21. The method of claim 20 further comprising correlating the second, fixed-width pulses to the first, fixed-width pulses to produce the delays.

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22. A method of monitoring an operation of a dispensing gun dispensing an adhesive pattern onto a substrate moving with respect to the dispensing gun, the method comprising:

providing gun ON and OFF signals representing times at which the dispensing gun should open and close, respectively;

opening and closing the dispensing gun in response to the gun ON and OFF signals, respectively;

providing feedback signals representing edges of the adhesive dispensed onto the substrate resulting from opening and closing the dispensing gun; and

determining delays between occurrences of the gun ON and OFF signals and corresponding edges of the adhesive resulting from the gun ON and OFF signals.

- 15 23. The method of claim 22 further comprising providing the gun ON and OFF signals from a pattern controller.
 - 24. The method of claim 22 further comprising providing the gun ON and OFF signals from a gun driver.

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